MIPRO

ACT-707D Dual Channel Wireless Receiver

Instruction Manual

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- pro audio with a smile

- 1- rack Frame
- ACT-function
- Color LCD Panel
- Dual 100 Preset Channels

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HANDHELD WIRELESS MICROPHONE

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ACT DUAL CHANNEL WIRELESS RECEIVER

1. INTRODUCTION

Thanks for choosing the most advanced dual channel wireless receiver system from MIPRO.

Please read this manual thoroughly for correct operating and optimal performance.

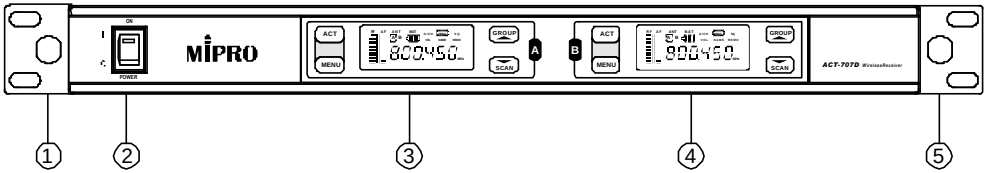
ACT-707D is an international EIA standard, 1-rack, true diversity metal receiver. It features the world's first ACT-function, color LCD panel displaying multiple statuses. It allows rapid change of channels, offers non-interfering channel selection and eliminates spurious interference. Other unique features include a built-in switch-mode power supply, an antenna divider system and independent or mixed outputs. It's 1-rack, dual-channel design saves space and reduces installation time. Another great value system! The ideal choice for dual-channel receives in one rack space!

Included Accessories :

① Antenna×2 ② Instruction Manual×1
③ Power Cable×1 ④ Rack-mount Brackets ×1-pair
⑤ AudioOutputCable × 1

2. PARTS NAME AND FUNCTIONS

Front Panel :



(Fig.1)

(1) Front Antenna A Input Connector : Allows an optional rear-to-front Antenna kit for front antenna placement.

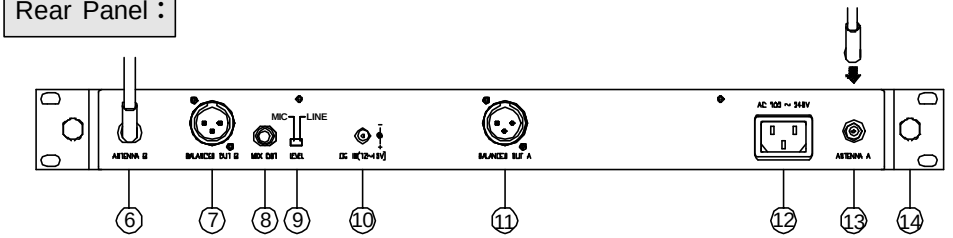
(2) Power Switch & Indicator: When switch is turned on, red indicator illuminates to denote normal power status.

(3) Receiver Panel A : Color LCD Panel A.

(4) Receiver Panel B : Color LCD Panel B.

(5) Front Antenna B Input Connector : Allows an optional rear-to-front Antenna kit for front antenna placement.

Rear Panel :



(Fig.2)

(6) Rear Antenna B input Connector: B Antenna connector can be installed with antenna directly and provides power for antenna booster..

(7)(11) Balanced Audio Output Jack: With Cannon / XLR type connector provides balanced audio output signal from this jack to the amplifier.

(8) Unbalanced Audio Mixed Output Jack : With 1/ 4λ Phone Jack provides the mixed unbalanced audio output signal from this jack to the amplifier.

(9) Unbalanced Level Switch: "MIC" selection is for "Microphone-level" output. "LINE" selection is for "Line-out" level output.

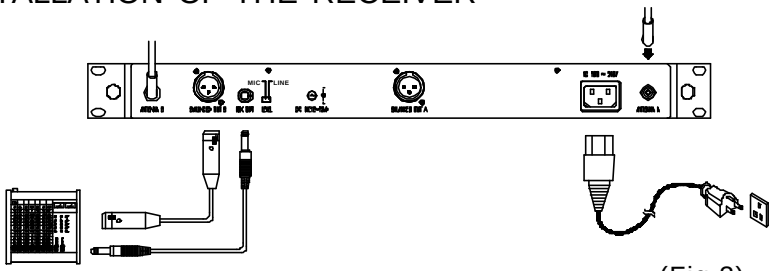
(10) DC 12V Input Jack: To connect 12 VDC from the AC/DC adapter.

(12) AC Input Jack: To connect 85 ~ 265 Volts AC power.

(13) Rear Antenna A input Connector: A Antenna connector can be installed with antenna directly and provides power for antenna booster.

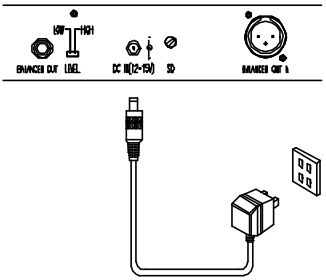
(14) Rackmount Bracket: To install the receiver into an EIA 19-inch standard rack case.

3. INSTALLATION OF THE RECEIVER

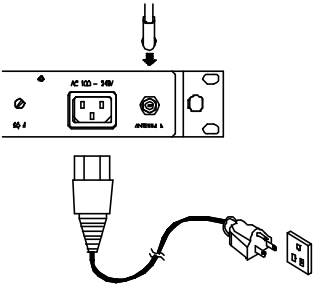


(Fig.3)

1. Install 2 separate antennas on the antenna sockets (6), (13) on the rear panel. Illustrated in figure 3.
2. Power Output Connection:
   (a) Connect the AC/DC adapter cable to DC 12V INPUT JACK (10), then plug the adapter unit into an appropriate AC outlet with caution to the correct voltage under both AC outlet and adapter marked, as shown in fig. 4.
   (b) With the appropriate AC power cable connects from AC Input Jack (12) to an AC outlet under the marked voltage 85~265 V, as shown in Fig. 5.



(Fig.4)



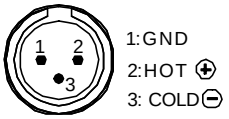
(Fig.5)

3. Audio Output Connection:
   (a) Unbalanced Level Switch (9) Setting Position: When inputs the unbalanced output of a receiver into "AUX-IN" input jack of a mixer or amplifier or "Electric Guitar", switch the Level Switch (9) to the right "LINE" position. Low sensitivity may occur if switch to the wrong position. When input the unbalanced output of a receiver into the "MIC-IN" input jack of a mixer or amplifier; switch the Level Switch (9) to the left "MIC" position. Over load distortion may occur if switch to the wrong position. When using electric guitar, don't use "MIC" position as it may have generated insufficient level.

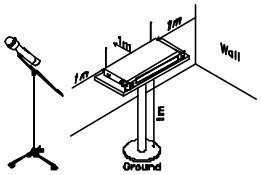
(b) Unbalanced Output: Using audio output cable attached with "PHONE PLUG" type, connect one end from the unbalanced output jack (8) of the receiver, and the other end to the "LINE-IN" input jack of the amplifier, as shown in Fig. 3.

(c) Balanced Output: Using audio output cables attached with "XLR" or "Cannon" type, connect one end from the balanced output jacks (7) of the receiver, and the other end to the "MIC IN" input jack of the mixer or amplifier, as shown in Fig. 3. (The characteristic of the 3-pin connector is as shown in Fig. 6

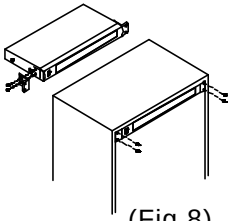
(d) Guitar Output: Using audio output cable attached with "PHONE PLUG" type, plug one end from the unbalanced output jack of a receiver, and the other end to the input jack of a guitar amplifier. Switch the Level Switch (9) to "LINE" position.



(Fig.6)



(Fig.7)



(Fig.8)

4. To ensure best reception possible, receiver must be installed at least one meter above ground. In addition, the distance between transmitter and receiver must be more than one meter and away from noise. (Shows in figure 7)

5. On the front panel of the receiver, 4 openings are pre-drilled for instant installation on the standard 19-inch rack case. (Shows in figure 8)

4. RECEIVER OPERATING PROCEDURES

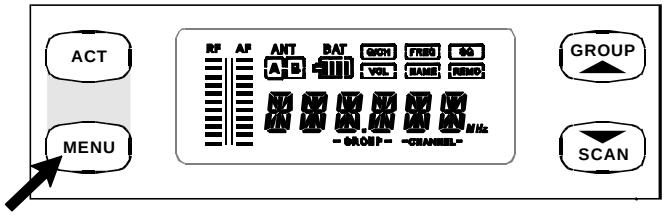
1. Turn volume controls of the mixer in use to a minimum setting before turn on the microphones or transmitters. After switches on the receiver, the power switch red indicator illuminates to denote normal power status.
2. Under normal circumstances, the RF indicator lights up when a microphone or transmitter is turned on near the receiver to indicate the receiver is ready for normal operation. Once sounds to the microphone and the AF indicators will glow according to the strength of sound level. If no LED glows or no sound outputs, the system is not function properly, thus it must be checked
3. The microphone output level needs to be adjusted at the amplifier or mixer. No need to adjust at the receiver itself.

5. CAUTIONS

1. When using DC power supply, please be aware of the operating voltage. First of all, please make sure minimum of 12 volts can be obtained for function properly. However, the power supply should not exceed its maximum capacity of 15 volts. When the supply voltage is more than 15 volts, the system will suffer severe internal damage. It is preferred the power source is from a regulated power with the minimum current of 1 A.
2. Use only MIPRO standard antenna to ensure the sensitivity of the receiver.
3. Antenna socket has 8-volts DC power supply; please do not short the circuit of this part.

6. Operation of Receiver with LCD Display Panel

1. Full Display of LCD Screen and Locations of buttons



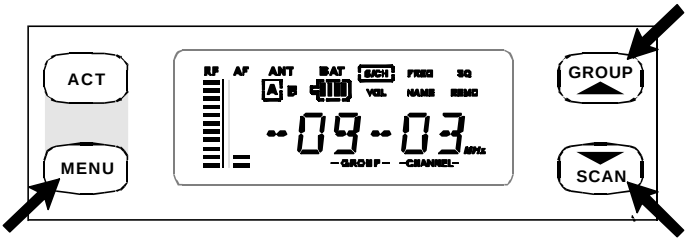
2. Designations of buttons and Functions

MENU: Enable user to select from one functiontotheother

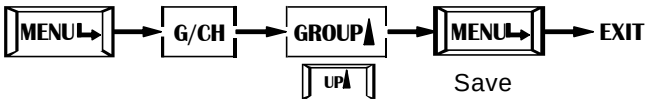
"MENU" button allows user to select among 6 options (in the sequence showingbelow) that each is surrounded in a square frame and shown on the upper half of LCD display. Detail functions and operations are as follows.

G/CH→FREQ→SQ→VOL→NAME→REMO

(1) G/CH: Indicates or setups the receiver GROUP and CHANNEL.



A. Opeartion o f setting GROUP :

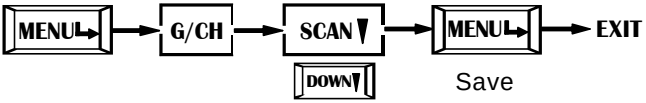


B. Operating explanation of setting Group:

A. Press "MENU" button once, select "G/CH" block from the below line of LCD view wheredisplays a horizontal bar and two numbers that represents group & channel accordingly from left to right.

b. Press "GROUP " button once, then the represented group number will start flashing meaning the system is at a status of waiting for setting. Press the button again, the group number will be changed following an increasing circle rule. At the same time, channel number will change to the last channel of selected group. When holding "GROUP " button, the group number will continue to change until "GROUP" button is released. Press "MENU" or "SCAN" button once to stop flashing and lock the group you desire to setup.

C. Opeartion o f setting CHANNEL :



D. Operating explanation of setting CHANNEL:

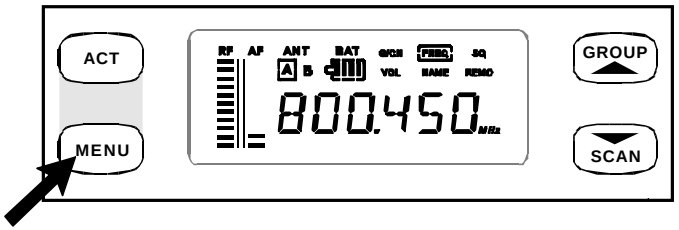
Similarly, press "MENU" button once, select "G/CH" block and press "SCAN▼" button once, then the two numbers on the right side of below line of LCD will start flashing which means a status of waiting for setting. Press "SCAN▼" button again the receiver will stop at a non-interfered channel number automatically. In case of all channels in the desired group are intefered and can't stop scanning, you can change to another group. Press the "SCAN▼" button again or hold it will keep scanning and continue to change until "SCAN▼" button is released. Press "MENU" button once to lock the channel you desire to setup, and channel number will be set and stop flashing.

E. Operating explanation of setting LOCK And UNLOCK:

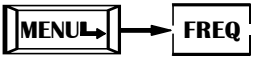
A. In case you want to lock all setting functions on the operating panel and avoid generating error operations, holding "MENU" button more than 3 seconds until the word "LOCK" showed on the LCD, then all the buttons will be inactive except "ACT" button , which means the setting of the panel is at the locking status.

b. In case you want to unlock the setting of panel, holding "MENU" button more than 3 seconds until the word "UNLOCK" showedontheLCD,thenthelockedsetting will be released accordingly.

(2) FREQ: Indicates the frequency that is currently inuse.



A. Operating Procedures.

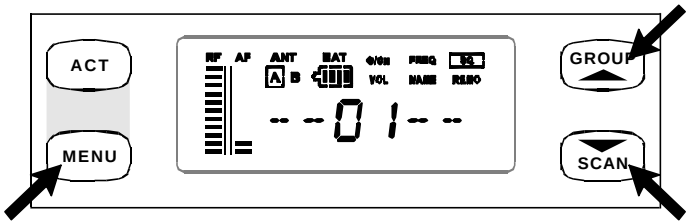


B. How to Operate?

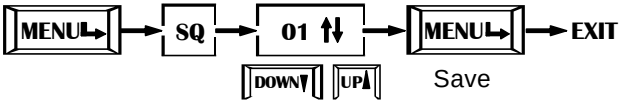
a. After push "MENU" button and select the "FREQ" frame, it will show the frequency that is set under the GROUP and CHANNEL that one had selected previously.

B. The operation only for displaying frequency, not for the function of changing frequency.

(3) SQ: Indicates or setups the Squelch level.



A. Operating Procedures.



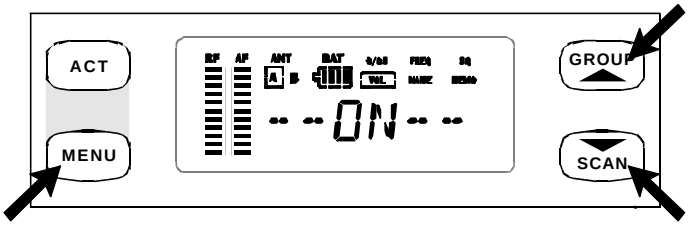
B. How to Operate?

a. User can set the squelch level within the range of 01-99.

b. To set the squelch level, simply by pushing the "UP" or "DOWN" button and confirm the modification by pushing "MENU" button.

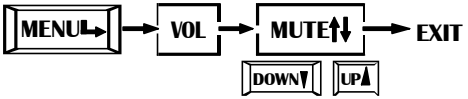
c. The bigger the setting number, the lower the sensitivity.

(4) VOL: Indicates Volume Level is at On or Mute position.



The operation provids mute control switch

A. Operating Procedures.



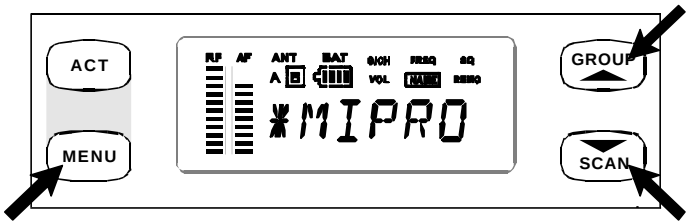
B. How to Operate?

Push "UP▲" or "DOWN▼" Button allows one to switch volume to "ON" or "Mute" status.

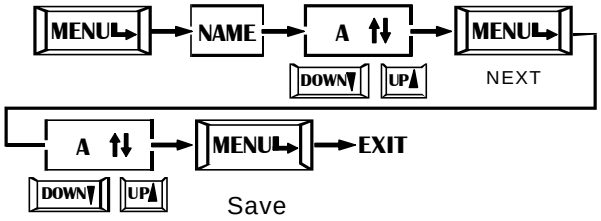
C. CAUTIONS :

AF bar and Ant. A, B of LCD panel will not displayed when the receiver module is at Mute status. To ascertain if receiver is at Mute status, press Menu key, select Volume. If LCD indicates "Mute" it is a Mute status. If LCD indicates "On" audio is operating normally.

(5) NAME: Indicates or setups the name of current channel user.



A. Operating Procedures.



B. How to Operate?

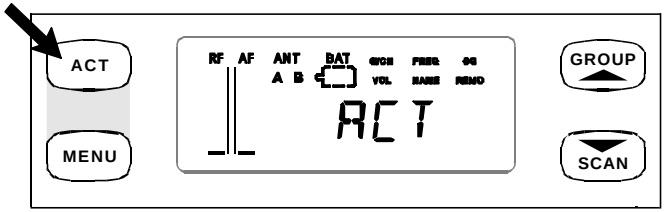
a. Maximum 6 characters are allowed (Select from capitalized English letter, numbers, + - x /, and space).

b. Push "UP" or "DOWN" button into setup mode and the character on the far left will start blinking. (There will be no blinking if there is no character in the specific space).

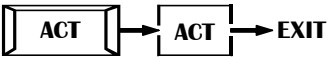
c. Push "UP" or "DOWN" button to select desired character and confirm by pushing the "MENU" button. Once confirmed, the next character will start blinking and ready for setup.

d. Repeat step c untilALL6 characters are set.

Operation of ACT Feature:



A. Operating Procedures.

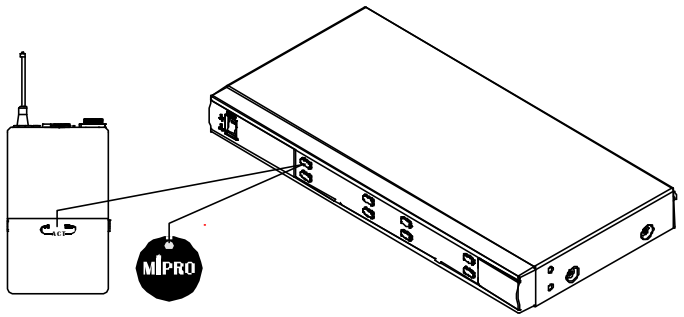


B. How to Operate?

a. At LCD panel displays "Group" and "Channel" mode keystroke "ACT" button . ACT mode is activated when "ACT" word appears on the LCD panel.

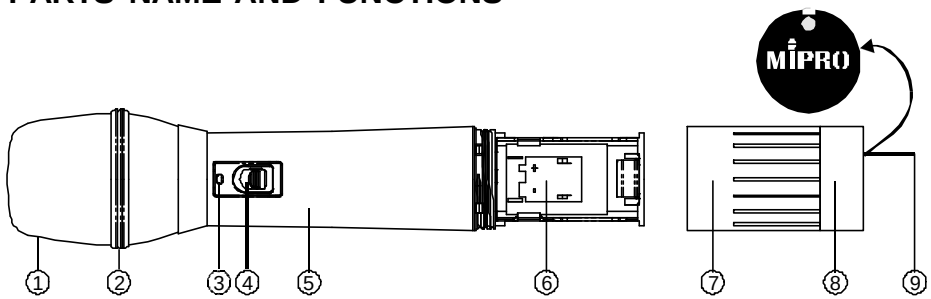
b. Move microphone toward to receiver within the distance around 20cm, and face the "ACT" marked side on the microphone to the "ACT" button on the panel of receiver , see below figure.

c. ACT function will release automatically once the transmitter channel is locked on. Simultaneously, "Group" and "Channel" mode will be back showing on the LCD panel. Both transmitter and receiver should show the same "Group" and "Channel". This indicates transmitter frequency set-up is successful. If unsuccessful, repeat step "A".



NOTE :

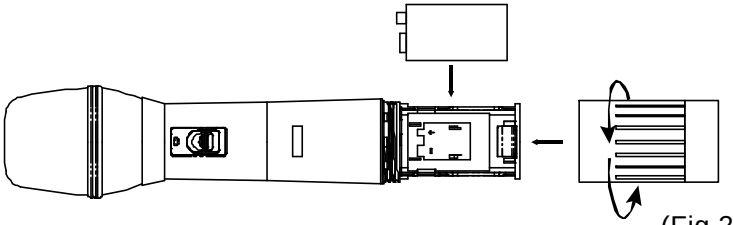
1. PARTS NAME AND FUNCTIONS



(Fig.1)

1. Grille: Protects cartridge, prevents "POP" noise and prevents microphone from rolling with polygonal shape.
2. Color Ring: For frequency differentiation.
3. Battery Status Indicator: Indicates power on / off and the battery status. When the power switch is turned ON, the red LEDs indicator flashes briefly, indicating normal battery status. If no flash occurs, it has either no battery or the battery is discharged or installed incorrectly. If after power on the indicator stays lighted, it warns that the battery is weak and should be replaced.
4. Power On-off Switch: Slide the switch for power " ON " or " OFF ".
5. Housing: Upper portion to be connected to capsule module and battery. Internally, it holds transmitter PCB.
6. Battery Compartment: Designed to accommodate two 1.5V(AA) batteries.
7. Battery Cap: Covers battery in the battery compartment.
8. Anti-roll Ring: For frequency differentiation.
9. ACT Signal Receiving Hole: Receiving ACT signal and adjusting frequency automatically.

2. BATTERY INSERTION



(Fig.2)

1. Unscrew battery cap in a counter-clockwise direction (7).
2. Insert a 9V battery into the battery compartment according to the correct polarity as shown in Fig.2. The moment the battery touches the terminals, the indicator will flash briefly (7). This means the polarity is correct. However, if no flash occurs, this indicates wrong insertion or that the battery is dead. Please re-insert the battery according to its correct polarity or exchange it for a fresh battery.

3. OPERATING INSTRUCTIONS

1. When microphone is switched on:

   When the power is switched on, the indicator will flash briefly indicating normal operation.

2. During Usage:

   The AF LED indicator on the receiver will illuminate according to the audio signal strength from the microphone.

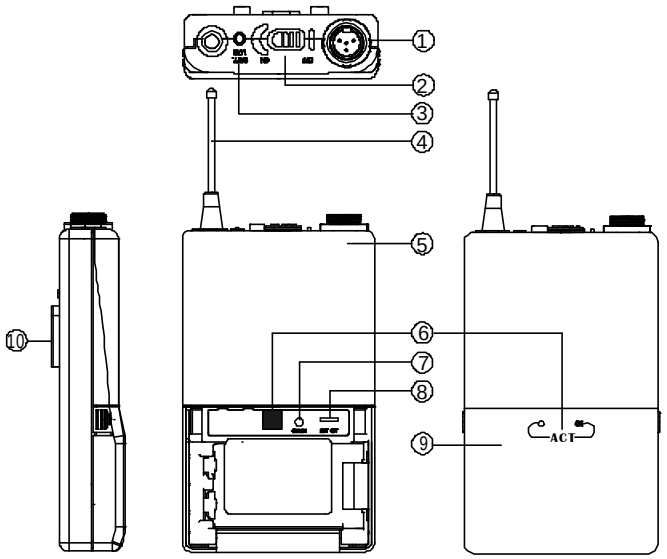
3. When the microphone is not in use:

   Make sure that you turn off the microphone after use to extend the battery life. Remove the battery from the battery compartment if microphone is not to be used again for some time. If a rechargeable battery was used, take it out and recharge it.

4. CAUTIONS

Under normal operation, when microphone and transmitter are paired together to set frequency, microphone indicator (3) will remain off after ACT setup the frequency. However, if indicator (3) is flashing, it means microphone and transmitter are not in the same frequency band. Please check the stickers on transmitter and receiver to observe if they are sharing the same frequency bands.

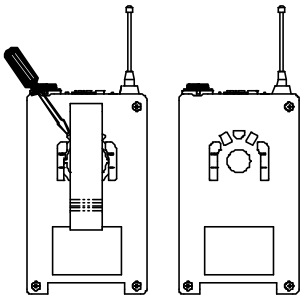
1. PARTS NAME AND FUNCTIONS



(Fig.1)

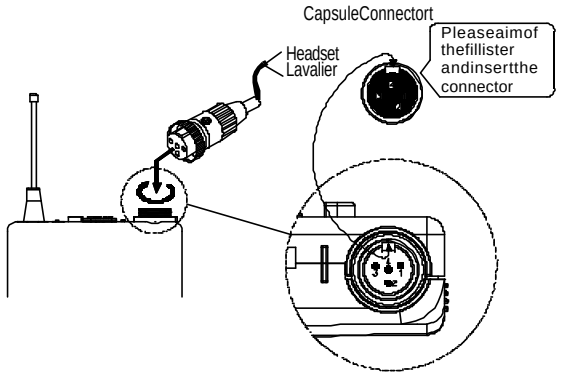
1. AF Input Jack: Connects to either lavaliere or headset microphone. (See 5 ways of connection on AF Input Connections)
2. Power Switch: Switch to ON position for operation. Switch to OFF position when not in use.
3. Battery Status Indicator: Indicates the power on / off and battery status.
   (a) When power switch is turned on: The LED indicator flashes briefly, indicating normal battery status.
   (b) When RED light illuminates at either power on or during usage: The battery level is low, therefore, a new battery replacement is thus necessary.
4. Transmitting Antenna: 1/ 4 λ transmitting antenna.
5. Transmitter Housing: Packages the PCB and battery.
6. ACT Signal Receiving Hole: Receiving ACT signal andadjusting frequency automatically.
7. Gain Control: Adjusts the desirous input gain.
8. GT/MT Level Select Switch: Switch GT position for electric guitar usage and "Line In". Gain Control is irrelevant for "GT". Switch to "MT" for condenser microphone or wired microphone. Gain Control works in "MT" for input sensitivity adjusting.

9. Battery Compartment and Cover:Accommodates two 1.5V(AA) batteries.
10. Detachable Belt Clip: Allows 360 degrees rotating to suit transmitting angles. To detach simply use a screwdriver at a 45 degree angle to unfasten. see diagram.



2. OPERATING INSTRUCTIONS

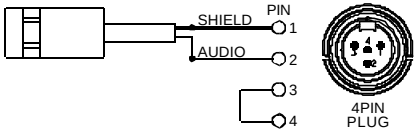
1. To adjust GT/MT Switch (8), and Gain Control (7), simply push down both snap locks on the sides of battery cover and flip it backwards to expose the adjustment panel.
2. Before power on, ascertain if same channelwas set up for both receiver and microphone. If not adjust to same channel accordingly.
3. The LED indicator flashes briefly when power on indicating normal battery status. If no flash occurs it has either no battery, the battery is drained or installed incorrectly. Change accordingly.
4. Plug the microphone connector into the input jack (1) and tighten the connector screw by clockwise direction as shown in (Fig. 2).



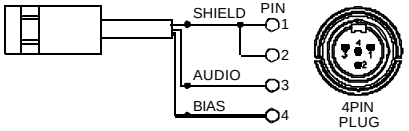
(Fig.2)

3. AF 4-PIN INPUT CONNECTION METHODS

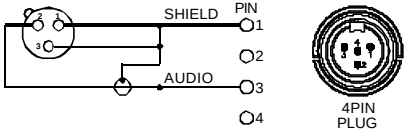
(1) 2-Wire Electret condenser microphone Capsule



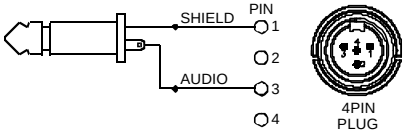
(2) 3-Wire Electret condenser microphone Capsule



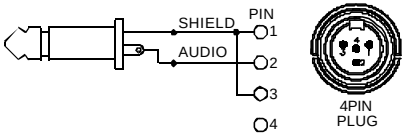
(3) Dynamic Microphone



(4) Electric Guitar

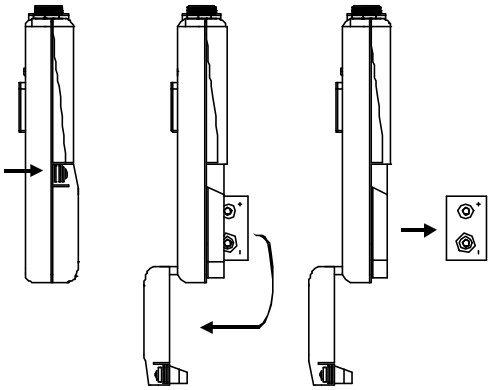


(5) Line-in (Impedance 8KΩ ATT. 10dB)

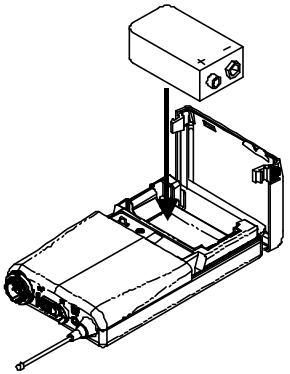


4. BATTERY INSTALLATION

1. Pushing down both snap locks on the sides of battery cover to open battery cover. Take out the batteries. Fig.(3).
2. Insert a 9V battery into the battery compartment according to the correct polarity as shown in Fig. (4). Then push up to close the battery compartment as shown in Fig. (4).



(Fig.3)



(Fig.4)

5. CAUTIONS

Under normal operation, when microphone and transmitter are paired together to set frequency, microphone indicator (3) will remain off after ACT setup the frequency. However, if indicator (3) is flashing, it means microphone and transmitter are not in the same frequency band. Please check the stickers on transmitter and receiver to observe if they are sharing the same frequency bands.

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